

**Remarks**

The Office Action of March 24, 2003 has been carefully considered. Reconsideration of this application is respectfully requested. An Information Disclosure Statement including two documents relating to Digital Signature Standard is being sent herewith.

The Examiner has reopened examination after appeal. Claims 1-21 are pending and stand rejected under 35 U.S.C. §103(a) as being unpatentable over Haines (6,233,409), in view of Haines (6,295,423), in view of Walker (6,302,527), in view of IDOC's, and further in view of Official Notice.

In response, Applicants respectfully traverses the rejections of claims 1-21. The distinction from Haines '409, Haines '423, Walker '527, IDOCs, and Boockholdt (5,794,094), referenced in Haines '423, may be briefly summarized as follows:

Haines '409 relates to a redundant reorder prevention system that prevents redundant reorders for replaceable components in printing devices. The replaceable component has memory integrated therein which contains a reorder value field. The reorder value field is initially configured in a first state which indicates that a new replaceable component has not been ordered to replace the current replaceable component. Before the system orders a new replaceable component, it checks the reorder value field. If the first state is detected, a new replaceable component is ordered and the reorder value field is reconfigured to a second state which indicates that the new replaceable component has been ordered. If the second state is detected before an order is placed, the order process is terminated before a new replaceable component is ordered.

Haines '423 relates to methods and apparatus for generating notifications associated with the lifetime of peripheral unit consumables are described. In the described embodiments, users or clients are able to define and adjust their own threshold values that are associated with a consumable's lifetime. In one

embodiment, a lifetime of a peripheral unit consumable that is associated with operation of the peripheral unit. The lifetime monitoring mechanism is configured with a user-manipulable, threshold-defining mechanism that is configured to receive user input and, responsive to the user input, define a threshold value for the lifetime monitoring mechanism. The peripheral unit's use of the consumable is monitored using the lifetime monitoring mechanism. A determination is made when the peripheral unit's use of the consumable reaches the threshold value and, responsive thereto, a notification is generated.

Walker '527 relates to a replaceable printing component for use in a printing system. The replaceable printing component is configured for containing a supply of printing material for use by the printing system to form images on media. The replaceable printing component includes a sensor for sensing printing material in the replaceable printing component. The sensor provides a sensor output signal that is indicative of a printing material level in the replaceable printing component. Also included is a linking device that is electrically connected to the sensor. The linking device emits a broadcast signal that is indicative of the sensor output signal. The inkjet printing system receives the broadcast signal for determining the printing material level in the replaceable printing component.

IDOCs relates to a technology that transforms "frozen" piece of paper into "intelligent documents" that hold the key to the electronic world. Each document is printed with a physical code (similar to a hyperlink on a web page) that points to relevant data or processes on the Internet or company Intranet-be it a product Web site, customer data, medical or financial histories, or more. The document with the code is considered to be IDOCs-Ready.

U.S. Patent No. 5,794,094 (Boockholdt) relates to a toner detecting system includes an image forming apparatus having a toner reservoir. A toner sensor of the system has a toner sensing element positioned to detect toner amount within the toner reservoir. A pixel counter of the system is configured to count pixels

used when forming images. A processor of the system associates counted pixels with previous toner use. The associated counted pixels and previous toner use cooperate to enable enhanced toner level characterization of remaining available toner level. A method for detecting toner level within a toner-reservoir of an image forming device according to the toner detecting system is also disclosed.

With regard to the 35 U.S.C. 103 rejections, it is not believed that the Examiner has established a prima facie case of obviousness as the Examiner has not examined each individual claim as a whole, and also appears to be using personal knowledge and hindsight analysis in these rejections. Moreover, for the 35 U.S.C. 103 obviousness combination rejection, it is also believed that such rejections are not sustainable, particularly since the Examiner appears to be utilizing a hindsight analysis approach, and moreover, selecting various pieces of art and using personal knowledge without providing specificity or providing evidence that one of ordinary skill in the art would be motivated to combine the references as suggested. The Examiner must provide specificity as to rejections and provide evidence that one of ordinary skill in the art would be motivated to combine the references or combine the references with asserted personal knowledge as suggested without utilizing the benefits of the teachings of the present application.

Referring now to the Examiner's rejections, they are not sustainable as the Examiner has not established a prima facie case of obviousness.

Without any specificity to applicability to the individual claims or to where in either Haines (other than a statement: "see at le[a]st abstract summary and Fig's 3-5") the limitations are disclosed, the Examiner has responded to claims 1-21 and made general assertions that Haines discloses:

- monitoring electronically a condition of a replaceable part in a first device (FIG 3) the replaceable part having: a first condition upon installation; at least one intermediate condition after use; and a third condition when a replacement part is substantially necessary;

- electronically sending a signal to a second device, the signal automatically electronically offering to purchase a replaceable part upon identification of at least one of the first condition, second condition, and third condition in the replaceable part; and
- predicting a condition of the part prior to the electronically sending the signal.
- installing the replaceable part prior to occurrence of the third condition.
- providing information relating to the signal to at least one of a user, a supplier, and a third party.
- the information relates to at least one of: (1) a present condition of the part; (2) a prediction of a future condition of the part; (3) an inquiry; and (4) an offer to purchase.
- at least one of the first device and the second device are interactive.
- sending data to the supplier after a user enters data.
- the information further relates to at least one of : (1) present supply of a consumable; (2) wear of a consumable; (3) usage of the part; (4) rate of depletion of a consumable; (5) rate of wear of the consumable; (5) predicted date of depletion of the consumable; (5) a predicted date of a need of a consumable; (6) delivery schedule of a consumable; and (5) statistical data relating to a part.

In response, Applicants traverses the Examiners rejections and respectfully requests examination of each individual claim, 1-21, as a whole; and for each rejected claim, 1-21, for the Examiner to provide a basis for such rejection including specificity of the teaching in the reference (column, lines, and/or Figures) and its applicability to limitations in each pending claim asserted by the Examiner to be disclosed in Haines or any other documents used by the Examiner as reason for

nonpatentability and rejection. For example, the Examiner has made a number of assertions including an indication that Haines discloses sending data to the supplier after the user enters data. Applicants requests specificity as to where in Haines and in which Haines (Haines '409 or '423) such a disclosure for sending data to the supplier after a user enters data is taught and its applicability to rejection of the pending claims, as appropriate. Moreover, this request for specificity applies for all claims and their respective limitations therein rejected by alleged teachings. Specificity and details will provide an opportunity for Applicants to fully understand the Examiners basis and reasoning for all claim rejections. The Examiner has not provided prima facie obviousness in the rejections of claims 1-21.

In addition, the Examiner indicates that Haines however does not teach the following features:

**Sending a digital electronic signature associated with the offering to purchase the replaceable part.** The Examiner asserts that Microsoft Computer dictionary, Fourth Edition, defines a signature as 1. A sequence of data used for identification, such as text appended to an e-mail message or fax. 2. A unique number built into hardware or software for authentication purposes. The Examiner asserts that Haines 409 teaches a unique component identifier that is used to identify the component part electronically (col 4, lines 50-65).

**receiving electronically an acceptance of the offer to purchase the replaceable part.** The Examiner asserts that Haines teaches placing an order automatically through electronic means (see at least summary), but does not specifically teach receiving electronically an acceptance of the offer to purchase the replaceable part. The Examiner asserts that it is old and well known in the art for acceptance of an offer to be confirmed. The Examiner asserts that it would be obvious to a person of ordinary skill in the art to include in Haines 409 an order

acceptance because this would confirm the order and reduce the possibility of sending parts that were not needed.

**delivering the replaceable part to the first device when monitoring indicates the condition of the part is between about the first condition and the third condition.** The Examiner asserts that Haines 409 teaches ordering a part when status monitoring indicates to do so (see at least FIG's 3, 4 and 5), but does not specifically mention that the parts will be delivered to the first device. The Examiner asserts that it is old and well known in the art to supply a shipping address when ordering parts. The Examiner asserts that it would have been obvious to a person of ordinary skill in the art to include Haines a shipping address, because the part would need to be delivered somewhere and delivering the part of the devices location would save handling and time.

**using a sensor and software system to perform monitoring and predicting of a condition of the part.** The Examiner asserts that Haines 409, teaches a status monitor 64, which monitors the toner cartridge 32 and receives a trigger event indicating that the orderer should initiate a process to order a new toner cartridge, but does not specifically mention a sensor. The Examiner asserts that Haines 423 teaches an exemplary toner sensor 30 is provided for use with a toner reservoir 31 of printer 10 for detecting the toner level present within reservoir 31. The Examiner asserts that it is to be appreciated that any type of toner sensor can be used in the context, including, but not limited to, artificial intelligence-based sensors, optical density sensors and capacitive. The Examiner asserts that although the toner sensor 30 is shown as being incorporated inside the reservoir 31, it is to be understood that it could be located outside of the reservoir as in the case of an optical density sensor or artificial intelligence-based sensor. The Examiner asserts that an example of an artificial intelligence-based sensor is disclosed in U.S. Pat. No. 5,794,094, incorporated by reference above (col 4, lines 36-47). The Examiner asserts that it

would be obvious to a person of ordinary skill in the art to include in Haines 409 the sensory devices as taught by Haines 423, because the service described in Haines 409 would require a sensing device of some sort to notify the status monitor that the toner condition is low.

**displaying a purchase order screen including data relating to the part automatically filled out on the purchase order screen based on an identified condition; and sending the data electronically to a supplier of the part after personal information data is automatically entered by an application program into the purchase order screen.** The Examiner asserts that Haines 409, discusses sending information from the supplier and an electronic order (col's 1, 2, and 3) but does not specifically mention a purchase order screen. The Examiner asserts that it is old and well known in the art for information sent to a users browser to contain an offer to purchase the part. The Examiner asserts that IDOCs teaches a linked URL that can contain an offer interactive enterprise application such as an order entry application for consumers. The Examiner asserts that it would be obvious to include the offer to purchase the part through the order entry application to increase the speed and ease of using the system.

**the electronically sending of the signal to the second device is a wireless communication.** The Examiner asserts that Haines 409 teaches an antenna coil item 50 and radio frequency identification (RFID) along with a RFID memory tag that communicates with the interrogator (col 3 and 4), but does not specifically mention the word wireless. The Examiner asserts that Walker teaches a wireless link that is connected to a sensor for sensing status of the replaceable printing component (col 1, line 63 through col 2, line 29). The Examiner asserts that it would be obvious to a person of ordinary skill in the art to include in Haines 409 the wireless connection as taught by Walker, because adding a wireless connection would

provide portability to the printer and would also be more adaptable because a hardwire would not need to be present in the printer for the system to operate.

In response, and as previously discussed, Applicants submits that the Examiner has not examined each individual claim, as a whole. Moreover, Applicants submit that the Examiner is using personal knowledge with respect to the rejection of the pending claims. Applicants respectfully requests an affidavit by the Examiner with respect to personal knowledge or Official Notice used to support the rejection of any of the pending claims, 1-21, including but not limited to limitations such as: displaying a purchase order screen including a part number for a part automatically filled out on the purchase order screen based on the identified condition; sending a digital electronic signature associated with the offering to purchase; receiving electronically an acceptance of the offer to purchase the replaceable part; delivering the replaceable part to the first device when monitoring indicates the condition of the part is between about the first condition and the third condition; displaying a purchase order screen including data relating to the part automatically filled out on the purchase order screen based on an identified condition; sending the data electronically to a supplier of the part after personal information data is automatically entered by an application program into the purchase order screen; electronically sending of the signal to the second device is a wireless communication; or launching a communications link to access a URL address, the URL address defined by the condition of the consumable part.

In response to the Examiner's assertion made regarding sending a digital electronic signature associated with the offering to purchase the replaceable part, Applicants note that the Examiner has indicated that Haines does not teach sending a digital electronic signature associated with the offering to purchase the replaceable part.



Moreover, Haines '409 (col. 3, line 65-col. 4 line 8) discloses:

The component memory 46 has a reorder value 52 and a component identifier 54 stored therein. It is noted, however, that the present invention may be implemented using either the reorder value 52 or the component identifier 54, i.e., it is not necessary to utilize both simultaneously. The reorder value 52 is initially configured to a first state which indicates that a new toner cartridge has not been ordered to replace the toner cartridge 32. The component identifier 54 may be any data which uniquely identifies the toner cartridge 32, such as a toner cartridge serial number.

Haines '409 (col. 4, lines 50-65) also discloses:

A component identifier lookup table 74a is located in the printer memory 58. Every component has a unique component identifier, such as a serial number. When a new component is ordered to replace a component, the serial number of the component is stored in the component identifier lookup table 74a. When the system detects a signal that a new component should be ordered, the system checks to determine whether the serial number of the component to be replaced is in the component identifier lookup table 74a. If it is, the new component has already been ordered and the order process is terminated. Although the component identifier table 74a is shown in the printer memory 58, it will become evident as this discussion progresses that the component identifier lookup table 74b may be located in the host computer 68 or the component identifier lookup table 74c may be located in the vendor system 70.

Applicants submit that the component identifier 54 in Haines '409 clearly relates to the unique identity of the cartridge. This is in contrast to sending a

digital electronic signature associated with the offering to purchase the replaceable part where authentication or security of an offer to purchase is desired. Applicants submit that there is no teaching or suggestion in Haines for sending a digital electronic signature associated with the offering to purchase the replaceable part.

Applicants respectfully traverses the Examiners rejections of claim 1-13, and 21. For claim 1, where, for example, in the '409, '423, '527, '094 patents and IDOCs document is there evidence of a disclosure or a suggestion for the combination of electronically sending a signal to a second device, the signal automatically electronically offering to purchase a replaceable part upon identification of at least one of the first condition, second condition, and third condition in the replaceable part; and sending a digital electronic signature associated with the offering to purchase the replaceable part as recited in independent claim 1?

It is respectfully submitted that independent claim 1 is patentable as the '409, '423, '527, '094 patents and IDOCs document does not teach, suggest or provide motivation for the totality of the combination, as a whole, as recited in independent claim 1. For example, Applicants submits that '409, '423, '527, '094 patents and IDOCs document does not teach or provide motivation to one of ordinary skill in the art for a method of ordering a part for a apparatus, including the combination: monitoring electronically a condition of a replaceable part in a first device, the replaceable part having: a first condition upon installation; at least one intermediate condition after use; and a third condition when a replacement part is substantially necessary; electronically sending a signal to a second device, the signal automatically electronically offering to purchase a replaceable part upon identification of at least one of the first condition, second condition, and third condition in the replaceable part; and sending a digital electronic signature associated with the offering to purchase the replaceable part, as recited in

independent claim 1. Claims 2-13, and 21 depend from independent claim 1 and are also believed to be allowable. Therefore, withdrawal of the rejection of claims 1-13, and 21 and allowance thereof is respectfully requested.

Applicants respectfully traverses the Examiners rejections of claim 14. Similar comments as presented hereinbefore with respect to the '409, '423, '527, '094 patents, IDOC document, personal knowledge and Official Notice are applicable and will not be repeated, and are incorporated herein by reference as part of the amendment.

For claim 14, where, for example, in the '409, '423, '527, '094 patents and IDOCs document is there evidence of a disclosure or a suggestion for the combination of displaying a purchase order screen including a part number for a part automatically filled out on the purchase order screen based on the identified condition; sending an electronic purchase order for the part; and sending a digital electronic signature associated with the purchase order for the part as recited in independent claim 14?

It is respectfully submitted that independent claim 14 is patentable as '409, '423, '527, '094 patents and IDOCs document does not teach, suggest or provide motivation for the totality of the combination, as a whole, as recited in independent claim 14. For example, Applicants submits that '409, '423, '527, '094 patents and IDOCs document does not teach or provide motivation to one of ordinary skill in the art for a method of ordering a part for an apparatus, including the combination: identifying electronically a condition in an apparatus; automatically launching an electronic communications to initiate at least one of an inquiry and an offer to purchase to a supplier based on the condition; displaying a purchase order screen including a part number for a part automatically filled out on the purchase order screen based on the identified condition; sending an electronic purchase order for the part; and sending a digital electronic signature associated with the purchase order for the part, as recited

in independent claim 14. Therefore, withdrawal of the rejection of claim 14 and allowance thereof is respectfully requested.

Applicants respectfully traverses the Examiners rejections of claims 15-16. Similar comments as presented hereinbefore with respect to the '409, '423, '527, '094 patents, IDOC document, personal knowledge and Official Notice are applicable and will not be repeated, and are incorporated herein by reference as part of the amendment.

For independent claim 15, where, for example, in the '409, '423, '527, '094 patents and IDOCs document is there evidence of a disclosure or a suggestion for the combination of launching an electronic communication to access a computer at an address defined by the condition; sending an electronic purchase offer for a replacement for the consumable part to the electronic address defined by the condition; and sending a digital electronic signature associated with the purchase offer as recited in independent claim 15?

It is respectfully submitted that independent claim 15 is patentable as the '409, '423, '527, '094 patents and IDOCs document does not teach, suggest or provide motivation for the totality of the combination, as a whole, as recited in independent claim 15. For example, Applicants submits that the '409, '423, '527, '094 patents and IDOCs document does not teach or provide motivation to one of ordinary skill in the art for a method of ordering a part for a marking device comprising: sensing a condition at a consumable part in the marking device, the marking device adapted to predict a code indicative of a threshold of a consumable; launching an electronic communication to access a computer at an address defined by the condition; sending an electronic purchase offer for a replacement for the consumable part to the electronic address defined by the condition; and sending a digital electronic signature associated with the purchase offer, as recited in independent claim 15. Claim 16 depends from independent claim 15 and is also believed to be allowable. Therefore,

withdrawal of the rejection of claims 15-16 and allowance thereof is respectfully requested.

Applicants respectfully traverses the Examiners rejections of claims 17-20. Similar comments as presented hereinbefore with respect to the '409, '423, '527, '094 patents, IDOC document, personal knowledge and Official Notice are applicable and will not be repeated, and are incorporated herein by reference as part of the amendment.

For independent claim 17, where, for example, in the '409, '423, '527, '094 patents and IDOCs document is there evidence of a disclosure or a suggestion for the combination of sending a purchase offer for a replacement for the consumable part to a URL address defined by the identified condition in the consumable part; and sending a digital electronic signature associated with the purchase offer as recited in independent claim 17?

It is respectfully submitted that independent claim 17 is patentable as the '409, '423, '527, '094 patents, IDOC document do not teach, suggest or provide motivation for the totality of the combination, as a whole, as recited in independent claim 17. For example, Applicants submits that '409, '423, '527, '094 patents, IDOC document do not teach or provide motivation to one of ordinary skill in the art for a method of ordering a part for an imaging apparatus comprising: identifying electronically a condition in a consumable part, the consumable part including at least one an ink cartridge, toner cartridge, photoreceptor cartridge, paper, and printhead, the consumable part having a first condition upon installation, at least one intermediate condition after use, and a third condition when a replacement of the consumable part is substantially necessary; using a software and sensor system associated with the apparatus for at least one of: (a) electronic monitoring of the condition of the consumable part; (b) electronic predicting of the condition of the consumable part; and after at least one of (a) and (b); (c) automatically launching an

electronic communications to initiate at least one of an inquiry and an offer to purchase a replacement for the consumable part at an occurrence or prediction of at least one of the first condition, intermediate condition, and third condition; sending a purchase offer for a replacement for the consumable part to a URL address defined by the identified condition in the consumable part; and sending a digital electronic signature associated with the purchase offer, as recited in independent claim 17. Claims 18-20 depend from claim 17 and are also believed to be allowable. Therefore, withdrawal of the rejection of claims 17-20 and allowance thereof is respectfully requested.

In summary, Applicants respectfully submits that in embodiments there is provided in the claims 1-21 improved methods which as recited in the pending claims, as a whole, are not disclosed or suggested in the '409, '423, '527, '094 patents, IDOC document, and personal knowledge and Official Notice. The Examiner has not established a prima facie case of obviousness for the reasons as indicated herein, and as a review of the entire teachings of the '409, '423, '527, '094 patents and IDOCs document readily reveals. The Examiner appears to be utilizing an obvious to try approach and hindsight analysis approach. The Examiner appears to be simply taking portions of the claims and trying to find pieces of these claims in various patents while not reviewing the entire claim, as a whole, and not providing factual evidence the references are combinable. The references must teach and be considered as a whole and suggest the desirability and thus the obviousness of making the combination, and the references must be viewed without the benefit of hindsight vision afforded by the claimed invention. Moreover, this argument and position applies to all the Examiner's rejections.

It is not believed that claims 1-21 are obvious and the combination rejections fail since the Examiner's rejection with the alleged teachings of references is not believed to be sustainable. The Examiner has not shown an objective teaching

or specificity in the prior art or an objective teaching in knowledge generally available to one of ordinary skill in the art that would lead to combine the relevant teachings of the references to obviate the claims 1-21. The invention does not simply reside in individual elements, rather the present invention includes limitations that have meaning, as a whole, as recited in the independent claims 1, 14, 15, and 17 and their respective dependant claims, and the Examiner has not established a prima facie case of obviousness with respect to these independent claims or their respective dependent claims. Thus, Applicants respectfully request that the Examiner reconsider each of the pending claims 1-21 in their entirety, as a whole, and to allow these claims and this application.

**Conclusion**

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is requested to call Applicant's attorney, Andrew D. Ryan, at telephone number (585) 422-8085, Rochester, New York.

Respectfully submitted,



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